IN THE SPECIFICATION:

The paragraph beginning at line 14 of page 2 has been amended as follows:

Conventional color management systems ignore the effects of a changed illuminant (or other changes in the viewing conditions) on the destination image. The flow of a typical color management system is illustrated in ~~Figure 19~~ Figure 14. Apart from gamut mapping and other changes, ~~Figure 19~~ Figure 14 is somewhat similar to the process described in U.S. Patent 5,463,480. The process operates on each individual color in a source image 150 so as to produce a corresponding CMYK color value for a destination image 160 in which the appearance of the colors in the destination image accurately matches the appearance of the colors in the source image. Thus, in step S1401, each individual RGB color value in the source image is converted into an XYZ tristimulus value, and a forward appearance model is applied in step S1402 for viewing conditions at the source so as to convert the XYZ tristimulus values into a JCh value in JCh color space (or other perceptual color space). In step S1404, gamut adjustments are made in the perceptual color space, and the resulting JCh color value is inverse-transformed in step S1405, using the destination device viewing conditions, into a single XYZ tristimulus value in viewing condition dependent color space. The XYZ tristimulus value is then converted to a color value in output device coordinates (such as CMYK), for printout by the output device (step S1407).

The paragraph beginning at line 5 of page 18 has been amended as follows:

Figures 6A and 6B provide ~~Figure 6 provides~~ a flowchart depicting and explaining the process of reducing metamerism in color management systems according to the present embodiment. In step S601, RGB source color data is accessed for the color management according to the present invention. Each individual RGB color value in the source image 150 is converted into an XYZ tristimulus value utilizing the spectral measurements for the source device. Next, a forward appearance model is applied for viewing conditions at the source so as to convert the XYZ tristimulus values into a perceptual color space in step S602. Gamut adjustments are then performed in perceptual color space using probabilistic estimates of an illuminant to adjust the image so that all colors can be reproduced. (step S604). Multiple different inverse appearance transforms are applied to a color value in perceptual color space, one each for different viewing conditions and associated weight values, thereby resulting in plural different target color values in viewing condition dependent space, one each in correspondence to the different viewing conditions (step S605). Regression analysis is applied in step S607 to obtain a single best fit color value in output device coordinates for the plural different target color values in viewing condition dependent space, modeling the device's color behavior using a spectral model.

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